

THE PORT AUTHORITY
OF NY & NJ
ENGINEERING PROGRAM MANAGER
WORLD TRADE CENTER
CHIEF ELECTRICAL ENGINEER

No. Date Revision Approved

ENGINEERING DEPARTMENT
WORLD
TRADE
CENTER
ELECTRICAL

Title

FIRE ALARM SYSTEM
PHASE III
5 WTC MER'S, EMR'S
AND SUBSTATIONS
STROBE, HORN
AND SPEAKER
CIRCUIT SCHEDULES

This drawing subject to conditions in Contract. All inventions, ideas, designs and methods herein are reserved to Port Authority and may not be used without its written consent.

FELDSTEIN ROYZMAN
Designed by Drawn by

5-17-99
Date

WTC-861.571
Contract Number

E-34
Drawing

NOTES:

1. FOR LEGEND, ABBREVIATIONS & GENERAL NOTES, SEE DWG E-1.

SPEAKER CIRCUIT SCHEDULE

TRANSPONDER LOCATION	TSC DESIGNATION	CIRCUIT DESIGN.	LOAD WATTS	AREA SERVED	SPEAKERS PER CIRCUIT				CIRCUIT LENGTH (FT)			REMARKS
					1/2W	1W	2W	4W	TRANSPONDER TO TSC	TSC TO E.O.L.	TOTAL	
FC-NEB1 LOCATED IN FIRE ALARM CLOSET, B1 LEVEL, 5 WTC NEAR THE COL. E20/13	TSC-M-NEB1	"E"	12	MER1, MER2	-	-	4	1	---	650	650	
		"F"	10	MER1, MER2	-	-	3	1		760	760	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
TOTAL SPEAKER LOAD			22									
FC-NEB2 LOCATED IN FIRE ALARM CLOSET, B2 LEVEL, 5 WTC	TSC-M-NEB2	"A"	3 1/2	EMR FE-1	1	3*	-	-	---	360	360	== EXISTING
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
TOTAL SPEAKER LOAD			3 1/2									
LOCATED IN 5 WTC, 3rd FLOOR, INSIDE MER1	TSC-F1A-NE3	"E"	2	MER #1	-	-	1	-	120 (SEE NOTE BELOW)	40	160	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
TOTAL SPEAKER LOAD			2.0									
NOTE: 120FT IS THE DISTANCE BETWEEN FA CLOSET FC-NE-? AND TSC-F1A												
FC-NE9 LOCATED IN 5 WTC, FIRE ALARM CLOSET, 9th FL. STAIRWAY "D"	TSC-M-NE9	"A"	6	9th FLOOR MER	-	-	3*	-	---	-	-	== EXISTING
		"D"	2	10th FLOOR EMR'S	-	-	1	-		130	130	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
		-	-	-	-	-	-	-		-	-	
TOTAL SPEAKER LOAD			8									

STROBE CIRCUIT SCHEDULE

TRANSPONDER	TSC OR PAD DESIGNATION	CIRCUIT NUMBER	LOAD amps	AREA SERVED	15cd	15/75cd	30cd	75cd	CIRCUIT LENGTH (FT)		
					0.063		0.100	0.165	TRANSPONDER TO TSC	TSC TO E.O.L.	TOTAL
FC-NEB1 LOCATED IN FIRE ALARM CLOSET, B1 LEVEL, 5 WTC NEAR MER1	TSC-M-NEB1	"A"	0.863	MER1	1	-	8	-	---	350	350
		"B"	0.800	MER1	-	-	8	-		340	340
	PAD-M-1	"G1"	0.828	MER2	2	-	7	-		450	450
		"G2"	0.800	MER1	-	-	8	-		330	330
	PAD-M-2	"H1"	0.700	MER1	-	-	7	-	370	370	
		"H2"	0.728	SUBSTATION	2	-	6	-	330	330	
	TOTAL STROBE LOAD			4.715							
FC-NEB2 LOCATED IN FIRE ALARM CLOSET, B2 LEVEL, 5 WTC	TSC-M-NEB2	"A"	0.063	EMR FE-1	1	-	-	-	---	280	280
	TOTAL STROBE LOAD			0.063							
LOCATED IN 5 WTC, 3rd FLOOR, INSIDE MER1	TSC-F1A-NE3	"E"	0.200	MER	-	-	2	-	120 (SEE NOTE BELOW)	100	220
	TOTAL STROBE LOAD			0.200							
NOTE: 120FT IS THE DISTANCE BETWEEN FA CLOSET FC-NE-? AND TSC-F1A											
FC-NE9 LOCATED IN 5 WTC, FIRE ALARM CLOSET, 9th FL. STAIRWAY "D"	TSC-M-NE9	"A"	0.500	9th FLOOR MER	-	-	5	-	---	440	440
		"B"	0.763	9th FLOOR MER	1	-	7	-		480	480
		"C"	0.400	9th FLOOR MER	-	-	4	-		470	470
		"D"	0.563	10th FLOOR EMR'S	1	-	5	-		410	410
		"G"	-	9th FLOOR MER-PAD-2 TRIGGER CKT	-	-	-	-		150	-
		"H"	-	9th FLOOR MER-PAD-2 TRIGGER CKT	-	-	-	-		150	-
	PAD-M-1	"G1"	0.763	9th FLOOR MER	1	-	7	-	220	220	
		"G2"	0.828	9th FLOOR MER	2	-	7	-	380	380	
		PAD-M-2	"H1"	0.700	9th FLOOR MER	-	-	7	-	400	400
			"H2"	0.565	9th FLOOR MER	-	-	4	1	330	330
TOTAL STROBE LOAD			5.08								

HORN CIRCUIT SCHEDULE

TRANSPONDER	TSC OR PAD DESIGNATION	CIRCUIT NUMBER	LOAD amps	AREA SERVED	HORN(S) PER CIRCUIT		CIRCUIT LENGTH (FT)		
					SEA-3		TRANSPONDER TO PAD	PAD TO E.O.L.	TOTAL
FC-NEB1 LOCATED IN FIRE ALARM CLOSET, B1 LEVEL, 5 WTC NEAR MER1	PAD-M-1	"G3"	1.2	B1 LEVEL MER1	2			330	330
		"G4"	1.2	B1 LEVEL MER1	2			250	250
	PAD-M-2	"H3"	1.2	B1 LEVEL MER1	2		--	280	280
		"H4"	1.2	B1 LEVEL MER1, SUBSTATION	2			270	270
TOTAL HORN LOAD			4.8						
FC-NE9 LOCATED IN 5 WTC, FIRE ALARM CLOSET, 9th FL. STAIRWAY "D"	PAD-M-1	"G3"	1.2	9th FLOOR MER	2			400	400
		"G4"	1.2	9th FLOOR MER	2			240	240
	PAD-M-2	"H3"	1.2	9th FLOOR MER	2		--	300	300
		"H4"	1.2	9th FLOOR MER	2			230	230
TOTAL HORN LOAD			4.8						

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF ONE OF THE CONTRACT DRAWINGS CONSTITUTING A PART OF CONTRACT NO. (C-861.571) IN THE FORM IN WHICH SAID DRAWINGS EXISTED AT THE TIME THE SAID CONTRACT WAS EXECUTED BY THE PARTIES.

DATE 12/17/99

CONTRACT ENGR./ARCH.

DATE 12/20/99

ENGINEERING PROGRAM MGR.